

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	14004	esterase\$1	US-PGPUB; USPAT	AND	OFF	2005/04/21 15:36
L2	262	aquifex or pyrophilus	US-PGPUB; USPAT	AND	OFF	2005/04/21 15:37
L3	6	1 same 2	US-PGPUB; USPAT	AND	OFF	2005/04/21 15:37

PGPUB-DOCUMENT-NUMBER: 20030064491

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030064491 A1

TITLE: Genes and proteins involved in the biosynthesis of
enediyne ring structures

PUBLICATION-DATE: April 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Farnet, Chris M.	Outremont		CA	
Staffa, Alfredo	Saint-Laurent		CA	
Zazopoulos, Emmanuel	Montreal		CA	

APPL-NO: 10/ 152886

DATE FILED: May 21, 2002

RELATED-US-APPL-DATA:

non-provisional-of-provisional 60291959 20010521 US

non-provisional-of-provisional 60334604 20011203 US

US-CL-CURRENT: 435/183, 435/320.1 , 435/325 , 435/69.1 , 435/76 , 536/23.2

ABSTRACT:

Five protein families cooperate to form the warhead structure that characterizes enediyne compounds, both chromoprotein enediynes and non-chromoprotein enediynes. The protein families include a polyketide synthase and thioesterase protein which form a polyketide synthase catalytic complex involved in warhead formation in enediynes. Genes encoding a member of each of the five protein families are found in all enediyne biosynthetic loci. The genes and proteins may be used in genetic engineering applications to design new enediyne compounds and in methods to identify new enediyne biosynthetic loci.

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims benefit under 35 USC .sctn. 119 of provisional applications U.S. Ser. No. 60/291,959 filed on May 21, 2001 and U.S. Ser. No. 60/334,604 filed on Dec. 3, 2001 which are hereby incorporated by reference in their entirety for all purposes.

----- KWIC -----

Detail Description Table CWU - DETL (11):

11TABLE 10 135E locus GenBank homology proposed function of Family #aa
Accession, #aa probability identity similarity GenBank match PKSE 1933
T37056, 2082aa 1e-65 282/909 (31.02%) 365/909 (40.15%) multi-domain beta
keto-acyl synthase, Streptomyces coelicolor BAB69208 1, 2365aa 3e-84 285/925
(30.81%) 366/925 (39.57%) polyketide synthase, Streptomyces avermitilis
T30937, 1053aa 2e-69 246/907 (27.12%) 356/907 (39.25%) glycolipid synthase,

Nostoc punctiforme TEBC 154 NP_249659 1, 146aa 2e-07 41/132 (31.06%) 63/132
 (47.73%) hypothetical protein, Pseudomonas aeruginosa AAD49752 1, 148aa
 2e-06 40/132 (30.3%) 62/132 (46.97%) orf1, Pseudomonas aeruginosa NP_214031
 1, 128aa 5e-04 35/127 (27.56%) 60/127 (47.24%) hypothetical protein, Aquifex
 aeolicus UNBL 323 NO HOMOLOG UNBV 655 CAC44518 1, 706aa 9e-04 41/135
 (30.37%) 59/135 (43.7%) putative secreted esterase, Streptomyces coelicolor
 UNBU 346 NP_486037 1, 300aa 4e-09 52/191 (27.23%) 87/191 (45.55%) hypothetical
 protein, Nostoc sp NP_440874 1, 285aa 9e-06 47/197 (23.86%) 89/197 (45.18%)
 hypothetical protein, Synechocystis sp

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:38:59 ON 21 APR 2005

=> fil .bec

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 15:39:12 ON 21 APR 2005
ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s esterase#

FILE 'MEDLINE'

L1 23372 ESTERASE#

FILE 'SCISEARCH'

L2 14330 ESTERASE#

FILE 'LIFESCI'

L3 5931 ESTERASE#

FILE 'BIOTECHDS'

L4 2381 ESTERASE#

FILE 'BIOSIS'

L5 44941 ESTERASE#

FILE 'EMBASE'

L6 15001 ESTERASE#

FILE 'HCAPLUS'

L7 34639 ESTERASE#

FILE 'NTIS'

L8 301 ESTERASE#

FILE 'ESBIOBASE'

L9 4085 ESTERASE#

FILE 'BIOTECHNO'

L10 4672 ESTERASE#

FILE 'WPIDS'

L11 2694 ESTERASE#

TOTAL FOR ALL FILES

L12 152347 ESTERASE#

=> s aquifex or pyrophilus

FILE 'MEDLINE'

214 AQUIFEX

34 PYROPHILUS

L13 214 AQUIFEX OR PYROPHILUS

FILE 'SCISEARCH'

283 AQUIFEX

89 PYROPHILUS

L14 283 AQUIFEX OR PYROPHILUS

FILE 'LIFESCI'

143 AQUIFEX
28 PYROPHILUS
L15 143 AQUIFEX OR PYROPHILUS

FILE 'BIOTECHDS'
38 AQUIFEX
8 PYROPHILUS
L16 40 AQUIFEX OR PYROPHILUS

FILE 'BIOSIS'
283 AQUIFEX
54 PYROPHILUS
L17 287 AQUIFEX OR PYROPHILUS

FILE 'EMBASE'
206 AQUIFEX
32 PYROPHILUS
L18 206 AQUIFEX OR PYROPHILUS

FILE 'HCAPLUS'
388 AQUIFEX
61 PYROPHILUS
L19 388 AQUIFEX OR PYROPHILUS

FILE 'NTIS'
1 AQUIFEX
1 PYROPHILUS
L20 1 AQUIFEX OR PYROPHILUS

FILE 'ESBIOBASE'
186 AQUIFEX
29 PYROPHILUS
L21 186 AQUIFEX OR PYROPHILUS

FILE 'BIOTECHNO'
141 AQUIFEX
29 PYROPHILUS
L22 141 AQUIFEX OR PYROPHILUS

FILE 'WPIDS'
33 AQUIFEX
8 PYROPHILUS
L23 34 AQUIFEX OR PYROPHILUS

TOTAL FOR ALL FILES
L24 1923 AQUIFEX OR PYROPHILUS

=> s 112 and 124
FILE 'MEDLINE'
L25 1 L1 AND L13

FILE 'SCISEARCH'
L26 0 L2 AND L14

FILE 'LIFESCI'
L27 0 L3 AND L15

FILE 'BIOTECHDS'
L28 2 L4 AND L16

FILE 'BIOSIS'
L29 0 L5 AND L17

FILE 'EMBASE'

L30 0 L6 AND L18

FILE 'HCAPLUS'

L31 4 L7 AND L19

FILE 'NTIS'

L32 0 L8 AND L20

FILE 'ESBIOBASE'

L33 0 L9 AND L21

FILE 'BIOTECHNO'

L34 0 L10 AND L22

FILE 'WPIDS'

L35 1 L11 AND L23

TOTAL FOR ALL FILES

L36 8 L12 AND L24

=> s 124(8a)gene/q

FILE 'MEDLINE'

L37 42 L13(8A)GENE/Q

FILE 'SCISEARCH'

L38 46 L14(8A)GENE/Q

FILE 'LIFESCI'

L39 31 L15(8A)GENE/Q

FILE 'BIOTECHDS'

L40 14 L16(8A)GENE/Q

FILE 'BIOSIS'

L41 59 L17(8A)GENE/Q

FILE 'EMBASE'

L42 33 L18(8A)GENE/Q

FILE 'HCAPLUS'

L43 130 L19(8A)GENE/Q

FILE 'NTIS'

L44 0 L20(8A)GENE/Q

FILE 'ESBIOBASE'

L45 35 L21(8A)GENE/Q

FILE 'BIOTECHNO'

L46 31 L22(8A)GENE/Q

FILE 'WPIDS'

L47 8 L23(8A)GENE/Q

TOTAL FOR ALL FILES

L48 429 L24(8A) GENE/Q

=> s 148 not 2002-2005/py

FILE 'MEDLINE'

1863162 2002-2005/PY

L49 25 L37 NOT 2002-2005/PY

FILE 'SCISEARCH'

3437504 2002-2005/PY

L50 26 L38 NOT 2002-2005/PY

FILE 'LIFESCI'

306945 2002-2005/PY

L51 21 L39 NOT 2002-2005/PY

FILE 'BIOTECHDS'

79449 2002-2005/PY

L52 6 L40 NOT 2002-2005/PY

FILE 'BIOSIS'

1589919 2002-2005/PY

L53 34 L41 NOT 2002-2005/PY

FILE 'EMBASE'

1578093 2002-2005/PY

L54 20 L42 NOT 2002-2005/PY

FILE 'HCAPLUS'

3534325 2002-2005/PY

L55 63 L43 NOT 2002-2005/PY

FILE 'NTIS'

41472 2002-2005/PY

L56 0 L44 NOT 2002-2005/PY

FILE 'ESBIOBASE'

958564 2002-2005/PY

L57 20 L45 NOT 2002-2005/PY

FILE 'BIOTECHNO'

244553 2002-2005/PY

L58 22 L46 NOT 2002-2005/PY

FILE 'WPIDS'

3316755 2002-2005/PY

L59 1 L47 NOT 2002-2005/PY

TOTAL FOR ALL FILES

L60 238 L48 NOT 2002-2005/PY

=> dup rem l60

PROCESSING COMPLETED FOR L60

L61 72 DUP REM L60 (166 DUPLICATES REMOVED)

=> d tot

L61 ANSWER 1 OF 72 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI **Aquifex pyrophilus** derived thermostable
pyrophosphatase (ApyPase) and coding **gene** used for genetic
engineering and diagnosis of hereditary diseases;
vector plasmid pAPYP-mediated recombinant protein gene transfer and
expression in Escherichia coli for use in disease diagnosis

AU HUH H S; KWON S T

AN 2002-14424 BIOTECHDS

PI KR 2001097348 8 Nov 2001

L61 ANSWER 2 OF 72 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN

TI **Gene** encoding heat resistant alanine racemase of
Aquifex pyrophilus, useful in medicine and food
industry;
enzyme production, vector expression in bacterium, fermentation and
incubation for food industry and medicine

AU YOO Y G

AN 2002-08972 BIOTECHDS
PI KR 2001083959 6 Sep 2001

L61 ANSWER 3 OF 72 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
TI Thermostable DNA polymerase **gene** isolated from **aquifex**
pyrophilus and its amino acid **sequence**;
enzyme gene production and modification from bacterium
AU CHOI J J; KWON S T
AN 2002-16315 BIOTECHDS
PI KR 2001113228 28 Dec 2001

L61 ANSWER 4 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Heat-resistant glutamate racemase and gene coding the same
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
IN Han, Ye Seon; Kim, Sang Suk; Kim, Seong Ho; Yoo, Yeon Gyu
AN 2004:877470 HCAPLUS
DN 142:50203

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2001036363	A	20010507	KR 1999-43339	19991008

L61 ANSWER 5 OF 72 MEDLINE on STN DUPLICATE 3
TI Cytochromes c555 from the hyperthermophilic bacterium Aquifex aeolicus. 2. Heterologous production of soluble cytochrome c555s and investigation of the role of methionine residues.
SO Biochemistry, (2001 Nov 13) 40 (45) 13690-8.
Journal code: 0370623. ISSN: 0006-2960.
AU Aubert C; Guerlesquin F; Bianco P; Leroy G; Tron P; Stetter K O; Bruschi M
AN 2001644001 MEDLINE

L61 ANSWER 6 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 4
TI Cytochromes c555 from the hyperthermophilic bacterium Aquifex aeolicus (VF5). 1. Characterization of two highly homologous, soluble and membranous, cytochromes c555.
SO Biochemistry, (November 13, 2001) Vol. 40, No. 45, pp. 13681-13689. print.
CODEN: BICHAW. ISSN: 0006-2960.
AU Baymann, Frauke; Tron, Pascale; Schoepp-Cothenet, Barbara [Reprint author]; Aubert, Corinne; Bianco, Pierre; Stetter, Karl-Otto; Nitschke, Wolfgang; Schutz, Michael
AN 2001:567239 BIOSIS

L61 ANSWER 7 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Genes linked by fusion events are generally of the same functional category: a systematic analysis of 30 microbial genomes
SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(14), 7940-7945
CODEN: PNASA6; ISSN: 0027-8424
AU Yanai, Itai; Derti, Adnan; DeLisi, Charles
AN 2001:526462 HCAPLUS
DN 136:178666

L61 ANSWER 8 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Differential effects of replacing Escherichia coli ribosomal protein L27 with its homologue from Aquifex aeolicus.
SO Journal of Bacteriology, (November, 2001) Vol. 183, No. 22, pp. 6565-6572. print.
CODEN: JOBAAY. ISSN: 0021-9193.
AU Maguire, Bruce A.; Manuilov, Anton V.; Zimmermann, Robert A. [Reprint author]
AN 2001:540050 BIOSIS

L61 ANSWER 9 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Comprehensive comparison between locations of orthologous genes on
 archaeal and bacterial genomes
 SO Bioinformatics (2001), 17(9), 791-802
 CODEN: BOINFP; ISSN: 1367-4803
 AU Horimoto, Katsuhisa; Fukuchi, Satoshi; Mori, Kentaro
 AN 2001:813196 HCAPLUS
 DN 136:396906

L61 ANSWER 10 OF 72 MEDLINE on STN DUPLICATE 5
 TI Identification and cloning of partial mbh2 gene cluster of
 hyperthermophile *Aquifex pyrophilus*.
 SO Wei sheng wu xue bao = Acta microbiologica Sinica, (2001 Dec) 41 (6)
 674-9.
 Journal code: 21610860R. ISSN: 0001-6209.
 AU Lu J; Rakhely G; Kovacs K L; Xiao C; Zhou P
 AN 2003044208 MEDLINE

L61 ANSWER 11 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Identification of novel essential Escherichia coli genes conserved among
 pathogenic bacteria
 SO Journal of Molecular Microbiology and Biotechnology (2001), 3(3), 483-489
 CODEN: JMMBFF; ISSN: 1464-1801
 AU Freiberg, Christoph; Wieland, Bernd; Spaltmann, Frank; Ehlert, Kerstin;
 Brotz, Heike; Labischinski, Harald
 AN 2001:348500 HCAPLUS
 DN 135:104920

L61 ANSWER 12 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Phylogenetic analyses of two "archaeal" genes in Thermotoga maritima
 reveal multiple transfers between archaea and bacteria
 SO Molecular Biology and Evolution (2001), 18(3), 362-375
 CODEN: MBEVEO; ISSN: 0737-4038
 AU Nesbo, Camilla L.; L'Haridon, Stephane; Stetter, Karl O.; Doolittle, W.
 Ford
 AN 2001:186845 HCAPLUS
 DN 135:283864

L61 ANSWER 13 OF 72 MEDLINE on STN DUPLICATE 6
 TI Prokaryotic structural maintenance of chromosomes (SMC) proteins:
 distribution, phylogeny, and comparison with MukBs and additional
 prokaryotic and eukaryotic coiled-coil proteins.
 SO Gene, (2001 Oct 31) 278 (1-2) 253-64.
 Journal code: 7706761. ISSN: 0378-1119.
 AU Soppa J
 AN 2001654625 MEDLINE

L61 ANSWER 14 OF 72 MEDLINE on STN DUPLICATE 7
 TI Expression in Escherichia coli of the thermostable inorganic
 pyrophosphatase from the Aquifex aeolicus and purification and
 characterization of the recombinant enzyme.
 SO Protein expression and purification, (2001 Nov) 23 (2) 242-8.
 Journal code: 9101496. ISSN: 1046-5928.
 AU Hoe H S; Kim H K; Kwon S T
 AN 2001642891 MEDLINE

L61 ANSWER 15 OF 72 MEDLINE on STN DUPLICATE 8
 TI Molecular cloning and characterization of thermostable DNA ligase from
 Aquifex pyrophilus, a hyperthermophilic bacterium.
 SO Extremophiles : life under extreme conditions, (2001 Jun) 5 (3) 161-8.
 Journal code: 9706854. ISSN: 1431-0651.
 AU Lim J H; Choi J; Han S J; Kim S H; Hwang H Z; Jin D K; Ahn B Y; Han Y S
 AN 2002019598 MEDLINE

L61 ANSWER 16 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Genome of *Aquifex aeolicus*
 SO Methods in Enzymology (2001), 330(Hyperthermophilic Enzymes, Part A),
 158-169
 CODEN: MENZAU; ISSN: 0076-6879
 AU Swanson, Ronald V.
 AN 2001:125818 HCAPLUS
 DN 135:314007

L61 ANSWER 17 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Expression and characterization of the terminal heme synthetic enzymes
 from the hyperthermophile *Aquifex aeolicus*
 SO FEMS Microbiology Letters (2001), 202(1), 115-119
 CODEN: FMLED7; ISSN: 0378-1097
 AU Wang, K.-F.; Dailey, T. A.; Dailey, H. A.
 AN 2001:591698 HCAPLUS
 DN 136:50095

L61 ANSWER 18 OF 72 MEDLINE on STN DUPLICATE 9
 TI Purification and properties of *Aquifex aeolicus* DNA polymerase expressed
 in *Escherichia coli*.
 SO FEMS microbiology letters, (2001 Jul 10) 201 (1) 73-7.
 Journal code: 7705721. ISSN: 0378-1097.
 AU Chang J R; Choi J J; Kim H K; Kwon S T
 AN 2001390998 MEDLINE

L61 ANSWER 19 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Evolution of gene order conservation in prokaryotes
 SO GenomeBiology [online computer file] (2001), 2(6), No pp. given
 CODEN: GNBLEW; ISSN: 1465-6914
 URL: <http://genomebiology.com/2001/2/6/research/0020>
 AU Tamames, Javier
 AN 2002:227287 HCAPLUS
 DN 137:213424

L61 ANSWER 20 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Nucleic acid probe-based diagnostic assays for prokaryotic and eukaryotic
 organisms using gene *ssrA* and its *t*mRNA transcript as targets
 SO PCT Int. Appl., 221 pp.
 CODEN: PIXXD2
 IN Barry, Thomas Gerard; Smith, Terence James
 AN 2000:824445 HCAPLUS
 DN 134:13982

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
PI WO 2000070086 A1		20001123	WO 2000-IE66	20000515
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				
CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,				
MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB,				
GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG				

L61 ANSWER 21 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Cloning and **sequence** of *Aquifex pyrophilus*
 superoxide dismutase **gene**, expression of the enzyme in
Escherichia coli and its pharmaceutical applications
 SO U.S., 17 pp.
 CODEN: USXXAM
 IN Han, Ye Sun; Yu, Yeon Gyu; Kim, Sung Hou; Lim, Jae Hwan; Ryu, Jae Ryeon;
 Choi, In Geol
 AN 2000:157663 HCAPLUS
 DN 132:204860

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 6033889	A	20000307	US 1998-8303	19980116
	KR 183362	B1	19990401	KR 1997-1140	19970116

L61 ANSWER 22 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Cyclic glucan synthesis with thermostable branching enzyme for use in food production

SO Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXXAF

IN Takada, Hiroki; Takabane, Takeshi; Kuriki, Takashi; Okada, Shigetaka

AN 2000:817136 HCAPLUS

DN 133:331188

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 2000316581	A2	20001121	JP 1999-130833	19990512
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L61 ANSWER 23 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Protein and cDNA sequences for a human ADP- ribosylglycohydrolase protein ARGHase, its expression and use

SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 21 pp.
 CODEN: CNXXEV

IN Li, Nenggan; Qian, Binzhi; Gao, Xin; Xiao, Huasheng; Chen, Zhu; Han, Zeguang

AN 2001:174517 HCAPLUS

DN 134:203430

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	CN 1264741	A	20000830	CN 2000-111778	20000302
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L61 ANSWER 24 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Antibacterial agents that target lipid A biosynthesis in gram-negative bacteria: inhibition of diverse UDP-3-O-(R-3-hydroxymyristoyl)-N-acetylglucosamine deacetylases by substrate analogs containing zinc binding motifs

SO Journal of Biological Chemistry (2000), 275(15), 11002-11009
 CODEN: JBCHA3; ISSN: 0021-9258

AU Jackman, Jane E.; Fierke, Carol A.; Tumey, L. Nathan; Pirrung, Michael; Uchiyama, Taketo; Tahir, S. Hasan; Hindsgaul, Ole; Raetz, Christian R. H.

AN 2000:270240 HCAPLUS

DN 133:27932

L61 ANSWER 25 OF 72 MEDLINE on STN DUPLICATE 10

TI A soxA gene, encoding a diheme cytochrome c, and a sox locus, essential for sulfur oxidation in a new sulfur lithotrophic bacterium.

SO Journal of bacteriology, (2000 Aug) 182 (15) 4278-87.
 Journal code: 2985120R. ISSN: 0021-9193.

AU Mukhopadhyaya P N; Deb C; Lahiri C; Roy P

AN 2000396412 MEDLINE

L61 ANSWER 26 OF 72 MEDLINE on STN DUPLICATE 11

TI Functionality of purified sigma(N) (sigma(54)) and a NifA-like protein from the hyperthermophile Aquifex aeolicus.

SO Journal of bacteriology, (2000 Mar) 182 (6) 1616-23.
 Journal code: 2985120R. ISSN: 0021-9193.

AU Studholme D J; Wigneshwereraraj S R; Gallegos M T; Buck M

AN 2000158878 MEDLINE

L61 ANSWER 27 OF 72 MEDLINE on STN DUPLICATE 12

TI Cloning and characterization of thermostable endoglucanase (Cel8Y) from the hyperthermophilic Aquifex aeolicus VF5.

SO Biochemical and biophysical research communications, (2000 Dec 20) 279 (2) 420-6.
 Journal code: 0372516. ISSN: 0006-291X.

AU Kim J O; Park S R; Lim W J; Ryu S K; Kim M K; An C L; Cho S J; Park Y W; Kim J H; Yun H D

AN 2001111040 MEDLINE

L61 ANSWER 28 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 13

TI Phylogenetic depth of the bacterial genera *Aquifex* and *Thermotoga* inferred from analysis of ribosomal protein, elongation factor, and RNA polymerase subunit sequences.

SO *Journal of Molecular Evolution*, (April, 2000) Vol. 50, No. 4, pp. 366-380. print.
CODEN: JMEVAU. ISSN: 0022-2844.

AU Bocchetta, Maurizio; Gribaldo, Simonetta; Sanangelantoni, Annamaria; Cammarano, Piero [Reprint author]

AN 2000:241251 BIOSIS

L61 ANSWER 29 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Hyperthermostable AONS: The first committed enzyme in *E. coli* biotin biosynthesis has a tropical relative.

SO *Biochemical Society Transactions*, (October, 2000) Vol. 28, No. 5, pp. A316. print.
Meeting Info.: 18th International Congress of Biochemistry and Molecular Biology. Birmingham, UK. July 16-20, 2000. International Union of Biochemistry and Molecular Biology; Federation of European Biochemical Societies; Biochemical Society.
CODEN: BCSTB5. ISSN: 0300-5127.

AU Mullan, Lisa J. [Reprint author]; Webster, Scott P. [Reprint author]; Alexeev, Dmitriy G. [Reprint author]; Baxter, Robert L. [Reprint author]

AN 2001:102325 BIOSIS

L61 ANSWER 30 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Polypurine polypyrimidine sequences in complete bacterial genomes: preference for polypurines in protein-coding regions

SO *Gene* (2000), 242(1-2), 275-283
CODEN: GENED6; ISSN: 0378-1119

AU Raghavan, Sowmya; Hariharan, Ramesh; Brahmachari, Samir K.

AN 2000:154073 HCAPLUS

DN 132:304159

L61 ANSWER 31 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Extremely thermostable elongation factor G from *Aquifex aeolicus*: Cloning, expression, purification, and characterization in a heterologous translation system.

SO *Protein Expression and Purification*, (April, 2000) Vol. 18, No. 3, pp. 257-261. print.
CODEN: PEXPEJ. ISSN: 1046-5928.

AU Martemyanov, Kirill A.; Liljas, Anders; Gudkov, Anatoly T. [Reprint author]

AN 2000:233620 BIOSIS

L61 ANSWER 32 OF 72 LIFESCI COPYRIGHT 2005 CSA on STN DUPLICATE 14

TI Reverse gyrase from hyperthermophiles: Probable transfer of a thermoadaptation trait from Archaea to Bacteria

SO *Trends in Genetics [Trends Genet.]*, (20000400) vol. 16, no. 4, pp. 152-156.
ISSN: 0168-9525.

AU Forterre, P.; De La Tour, C.B.; Philippe, H.; Duguet, M.

AN 2000:76087 LIFESCI

L61 ANSWER 33 OF 72 MEDLINE on STN DUPLICATE 15

TI The alternative sigma factor sigma(28) of the extreme thermophile *Aquifex aeolicus* restores motility to an *Escherichia coli* *fliA* mutant.

SO *FEMS microbiology letters*, (2000 Oct 1) 191 (1) 103-7.
Journal code: 7705721. ISSN: 0378-1097.

AU Studholme D J; Buck M
AN 2001045810 MEDLINE

L61 ANSWER 34 OF 72 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN DUPLICATE 16

TI Characterization of a solvent resistant and thermostable aminopeptidase
from the hyperthermophilic bacterium, *Aquifex aeolicus*
SO ENZYME AND MICROBIAL TECHNOLOGY, (JUL 2000) Vol. 27, No. 1-2, pp. 83-88.
Publisher: ELSEVIER SCIENCE INC, 655 AVENUE OF THE AMERICAS, NEW YORK, NY
10010.
ISSN: 0141-0229.

AU Khan A R; Nirasawa S; Kaneko S; Shimonishi T; Hayashi K (Reprint)
AN 2000:506413 SCISEARCH

L61 ANSWER 35 OF 72 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
STN DUPLICATE 17

TI Molecular cloning of an extremely thermostable alanine racemase from
Aquifex pyrophilus and enzymatic characterization of the expressed protein
SO JOURNAL OF BIOCHEMISTRY AND MOLECULAR BIOLOGY, (31 JAN 2000) Vol. 33, No.
1, pp. 82-88.
Publisher: SPRINGER-VERLAG SINGAPORE PTE LTD, #04-01 CENCON I, 1 TANNERY
RD, SINGAPORE 347719, SINGAPORE.
ISSN: 1225-8687.

AU Kim S S; Yu Y G (Reprint)
AN 2000:90575 SCISEARCH

L61 ANSWER 36 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Genome evolution. Gene fusion versus gene fission
SO Trends in Genetics (2000), 16(1), 9-11
CODEN: TRGEE2; ISSN: 0168-9525

AU Snel, Berend; Bork, Peer; Huynen, Martijn
AN 2000:55022 HCAPLUS
DN 132:190460

L61 ANSWER 37 OF 72 MEDLINE on STN DUPLICATE 18

TI The biology of enhancer-dependent transcriptional regulation in bacteria:
insights from genome sequences.
SO FEMS microbiology letters, (2000 May 1) 186 (1) 1-9. Ref: 25
Journal code: 7705721. ISSN: 0378-1097.
AU Studholme D J; Buck M
AN 2000395687 MEDLINE

L61 ANSWER 38 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Interkingdom gene fusions
SO GenomeBiology [online computer file] (2000), 1(6), No pp. given
CODEN: GNBLEW; ISSN: 1465-6914
URL: <http://www.genomebiology.com/retriever.asp?url=/2000/1/6/research/0013>

AU Wolf, Yuri I.; Kondrashov, Alexey S.; Koonin, Eugene V.
AN 2001:182692 HCAPLUS
DN 136:15880

L61 ANSWER 39 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Sequences of members of the novel bacterial *yihA* gene family, and uses
thereof in screening for novel broad spectrum antibiotics
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2

IN Arigoni, Fabrizio; Edgerton, Michael David; Loferer, Hannes; Peitsch,
Manuel C.

AN 1999:691219 HCAPLUS
DN 131:333017

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9954474	A2	19991028	WO 1999-EP2640	19990420

WO 9954474 A3 20000504
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9937090 A1 19991108 AU 1999-37090 19990420

L61 ANSWER 40 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Sequences of members of the novel bacterial ycfB gene family, and uses
thereof in screening for novel broad spectrum antibiotics
SO PCT Int. Appl., 56 pp.
CODEN: PIXXD2
IN Arigoni, Fabrizio; Edgerton, Michael David; Loferer, Hannes; Peitsch,
Manuel C.
AN 1999:691207 HCAPLUS
DN 131:333015
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9954462 A2 19991028 WO 1999-EP2638 19990420
WO 9954462 A3 20000622
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9937089 A1 19991108 AU 1999-37089 19990420

L61 ANSWER 41 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Structure-specific tRNA-binding protein from the extreme thermophile
Aquifex aeolicus
SO EMBO Journal (1999), 18(12), 3475-3483
CODEN: EMJODG; ISSN: 0261-4189
AU Morales, Arturo J.; Swairjo, Manal A.; Schimmel, Paul
AN 1999:433529 HCAPLUS
DN 131:196766

L61 ANSWER 42 OF 72 MEDLINE on STN DUPLICATE 19
TI Sequences and evolutionary analyses of eukaryotic-type protein kinases
from Streptomyces coelicolor A3(2).
SO Microbiology (Reading, England), (1999 Dec) 145 (Pt 12) 3343-52.
Journal code: 9430468. ISSN: 1350-0872.
AU Ogawara H; Aoyagi N; Watanabe M; Urabe H
AN 2000090459 MEDLINE

L61 ANSWER 43 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Conservation of xer site-specific recombination genes in bacteria
SO Molecular Microbiology (1999), 34(5), 1146-1148
CODEN: MOMIEE; ISSN: 0950-382X
AU Recchia, Gavin D.; Sherratt, David J.
AN 2000:26678 HCAPLUS
DN 132:176460

L61 ANSWER 44 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Evolutionary relationships among photosynthetic prokaryotes
(Heliobacterium chlorum, Chloroflexus aurantiacus, cyanobacteria,

Chlorobium tepidum and proteobacteria): implications regarding the origin of photosynthesis

SO Molecular Microbiology (1999), 32(5), 893-906
CODEN: MOMIEE; ISSN: 0950-382X
AU Gupta, Radhey S.; Mukhtar, Tariq; Singh, Bhag
AN 1999:380511 HCAPLUS
DN 131:182139

L61 ANSWER 45 OF 72 MEDLINE on STN DUPLICATE 20
TI A [2Fe-2S] protein from the hyperthermophilic bacterium Aquifex aeolicus.
SO Biochemical and biophysical research communications, (1999 Aug 11) 261 (3) 885-9.
Journal code: 0372516. ISSN: 0006-291X.
AU Chatelet C; Gaillard J; Petillot Y; Louwagie M; Meyer J
AN 1999373173 MEDLINE

L61 ANSWER 46 OF 72 MEDLINE on STN DUPLICATE 21
TI Extremely thermostable serine-type protease from Aquifex pyrophilus.
Molecular cloning, expression, and characterization.
SO Journal of biological chemistry, (1999 Jan 8) 274 (2) 881-8.
Journal code: 2985121R. ISSN: 0021-9258.
AU Choi I G; Bang W G; Kim S H; Yu Y G
AN 1999091626 MEDLINE

L61 ANSWER 47 OF 72 MEDLINE on STN DUPLICATE 22
TI A new member of the endonuclease III family of DNA repair enzymes that removes methylated purines from DNA.
SO Current biology : CB, (1999 Jun 17) 9 (12) 653-6.
Journal code: 9107782. ISSN: 0960-9822.
AU Begley T J; Haas B J; Noel J; Shekhtman A; Williams W A; Cunningham R P
AN 1999307502 MEDLINE

L61 ANSWER 48 OF 72 MEDLINE on STN DUPLICATE 23
TI RNA polymerase of Aquifex pyrophilus: implications for the evolution of the bacterial rpoBC operon and extremely thermophilic bacteria.
SO Journal of molecular evolution, (1999 May) 48 (5) 528-41.
Journal code: 0360051. ISSN: 0022-2844.
AU Klenk H P; Meier T D; Durovic P; Schwass V; Lottspeich F; Dennis P P; Zillig W
AN 1999214260 MEDLINE

L61 ANSWER 49 OF 72 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 24
TI Discontinuous occurrence of the hsp70 (dnaK) gene among Archaea and sequence features of HSP70 suggest a novel outlook on phylogenies inferred from this protein.
SO Journal of Bacteriology, (Jan., 1999) Vol. 181, No. 2, pp. 434-443. print. CODEN: JOBAAY. ISSN: 0021-9193.
AU Gribaldo, Simonetta; Lumia, Valentina; Creti, Roberta; Conway De Macario, Everly; Sanangelantoni, Annamaria; Cammarano, Piero [Reprint author]
AN 1999:98324 BIOSIS

L61 ANSWER 50 OF 72 MEDLINE on STN DUPLICATE 25
TI Functional and biochemical characterization of a recombinant 3-Deoxy-D-manno-octulosonic acid 8-phosphate synthase from the hyperthermophilic bacterium Aquifex aeolicus.
SO Biochemical and biophysical research communications, (1999 Sep 24) 263 (2) 346-51.
Journal code: 0372516. ISSN: 0006-291X.
AU Duewel H S; Sheflyan G Y; Woodard R W
AN 1999423466 MEDLINE

L61 ANSWER 51 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
TI Distribution of species specific gene family in microorganisms

SO Genome Informatics Series (1999), 10, 326-327
 CODEN: GINSE9; ISSN: 0919-9454
 AU Ara, Takeshi; Suzuki, Kenji; Matuda, Hideo; Mori, Hirotada
 AN 2000:80333 HCAPLUS
 DN 133:84950

L61 ANSWER 52 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Archaeal and bacterial hyperthermophiles: horizontal gene exchange or
 common ancestry? Comments
 SO Trends in Genetics (1999), 15(8), 298-299
 CODEN: TRGEE2; ISSN: 0168-9525
 AU Kyrpides, Nikos C.; Olsen, Gary J.
 AN 1999:503535 HCAPLUS
 DN 131:269434

L61 ANSWER 53 OF 72 MEDLINE on STN DUPLICATE 26
 TI Molecular cloning, expression, and characterization of a thermostable
 glutamate racemase from a hyperthermophilic bacterium, Aquifex pyrophilus.
 SO Extremophiles : life under extreme conditions, (1999 Aug) 3 (3) 175-83.
 Journal code: 9706854. ISSN: 1431-0651.
 AU Kim S S; Choi I G; Kim S H; Yu Y G
 AN 1999411974 MEDLINE

L61 ANSWER 54 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Studies of codon usage and tRNA genes of 18 unicellular organisms and
 quantification of Bacillus subtilis tRNAs: gene expression level and
 species-specific diversity of codon usage based on multivariate analysis
 SO Gene (1999), 238(1), 143-155
 CODEN: GENED6; ISSN: 0378-1119
 AU Kanaya, Shigehiko; Yamada, Yuko; Kudo, Yoshihiro; Ikemura, Toshimichi
 AN 1999:716490 HCAPLUS
 DN 132:19581

L61 ANSWER 55 OF 72 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN DUPLICATE 27
 TI A sequencer of thirty bases that is highly repetitive in archaeobacterial
 genomes
 SO PROCEEDINGS OF THE JAPAN ACADEMY SERIES B-PHYSICAL AND BIOLOGICAL
 SCIENCES, (JAN 1999) Vol. 75, No. 1, pp. 16-21.
 Publisher: JAPAN ACAD, 7-32 UENO PARK, TOKYO 110, JAPAN.
 ISSN: 0386-2208.
 AU Suckow J M; Suzuki M (Reprint)
 AN 1999:169952 SCISEARCH

L61 ANSWER 56 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Thermostable mutL genes and proteins and their uses in nucleic acid
 amplification and hybridization
 SO PCT Int. Appl., 148 pp.
 CODEN: PIXXD2
 IN Wetmur, James G.
 AN 1998:65999 HCAPLUS
 DN 128:150360

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9801562	A1	19980115	WO 1997-US11567	19970701
W: AU, CA, IL, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6294325	B1	20010925	US 1996-676444	19960705
AU 9736486	A1	19980202	AU 1997-36486	19970701

L61 ANSWER 57 OF 72 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN
 TI Novel Aquifex pyrophilus superoxide dismutase polynucleotides and
 polypeptides, used for the treatment of inflammation, autoimmune
 disorders, and chromosome lesions.

PI KR 98065913 A 19981015 (199950)* 1 C12N015-53
 US 6033889 A 20000307 (200022)B 17 C12N009-02
 KR 183362 B1 19990401 (200113) C12N015-53
 IN CHOE, I; HAN, Y; LIM, J; RYU, J; YOO, Y; CHOI, I G; HAN, Y S; KIM, S H;
 LIM, J H; RYOO, J R; YOO, Y G; RYU, J R; YU, Y G

L61 ANSWER 58 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Aquifex pyrophilus
 SO Bacterial Genomes (1998), 605-607. Editor(s): De Bruijn, Frans J.;
 Lupski, James R.; Weinstock, George M. Publisher: Chapman & Hall, New
 York, N. Y.
 CODEN: 65KVAK
 AU Schmitt, Rudiger
 AN 1997:778269 HCAPLUS
 DN 128:84986

L61 ANSWER 59 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI The complete genome of the hyperthermophilic bacterium Aquifex aeolicus
 SO Nature (London) (1998), 392(6674), 353-358
 CODEN: NATUAS; ISSN: 0028-0836
 AU Deckert, Gerard; Warren, Patrick V.; Gaasterland, Terry; Young, William
 G.; Lenox, Anna L.; Graham, David E.; Overbeek, Ross; Snead, Marjory A.;
 Keller, Martin; Aujay, Monette; Huber, Robert; Feldman, Robert A.; Short,
 Jay M.; Olsen, Gary J.; Swanson, Ronald V.
 AN 1998:229920 HCAPLUS
 DN 128:253667

L61 ANSWER 60 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Sequence and phylogenetic position of a class II aldolase gene in the
 amitochondriate protist, Giardia lamblia
 SO Gene (1998), 222(2), 163-168
 CODEN: GENED6; ISSN: 0378-1119
 AU Henze, Katrin; Morrison, Hilary G.; Sogin, Mitchell L.; Muller, Miklos
 AN 1998:809228 HCAPLUS
 DN 130:163804

L61 ANSWER 61 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Genomic analysis of the genes encoding ribosomal proteins in eight
 eubacterial species and Saccharomyces cerevisiae
 SO Genome Informatics Series (1998), 9, 3-12
 CODEN: GINSE9; ISSN: 0919-9454
 AU Fujita, Katsutoshi; Baba, Tomoya; Isono, Katsumi
 AN 1999:175410 HCAPLUS
 DN 131:68899

L61 ANSWER 62 OF 72 MEDLINE on STN DUPLICATE 28
 TI Cloning and expression of superoxide dismutase from Aquifex pyrophilus, a
 hyperthermophilic bacterium.
 SO FEBS letters, (1997 Apr 7) 406 (1-2) 142-6.
 Journal code: 0155157. ISSN: 0014-5793.
 AU Lim J H; Yu Y G; Choi I G; Ryu J R; Ahn B Y; Kim S H; Han Y S
 AN 97263490 MEDLINE

L61 ANSWER 63 OF 72 MEDLINE on STN DUPLICATE 29
 TI Random **sequence** analysis of genomic DNA of a hyperthermophile:
Aquifex pyrophilus.
 SO Extremophiles : life under extreme conditions, (1997 Aug) 1 (3) 125-34.
 Journal code: 9706854. ISSN: 1431-0651.
 AU Choi I G; Kim S S; Ryu J R; Han Y S; Bang W G; Kim S H; Yu Y G
 AN 1998343912 MEDLINE

L61 ANSWER 64 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI Cloning and expression of thermostable mutS genes and proteins from
 hyperthermophilic bacteria and their applications to improve fidelity in

DNA amplification techniques

SO PCT Int. Appl., 92 pp.

CODEN: PIXXD2

IN Wetmur, James G.

AN 1997:85214 HCAPLUS

DN 126:85652

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9639525	A1	19961212	WO 1996-US8677	19960604
	W: CA, IL, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 5877280	A	19990302	US 1995-468558	19950606
	CA 2221451	AA	19961212	CA 1996-2221451	19960604
	EP 832240	A1	19980401	EP 1996-919058	19960604
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 11511010	T2	19990928	JP 1996-501189	19960604

L61 ANSWER 65 OF 72 MEDLINE on STN DUPLICATE 30

TI Sensitivity of ribosomes of the hyperthermophilic bacterium Aquifex pyrophilus to aminoglycoside antibiotics.

SO Journal of bacteriology, (1996 Mar) 178 (6) 1762-5.

Journal code: 2985120R. ISSN: 0021-9193.

AU Bocchetta M; Huber R; Cammarano P

AN 96198182 MEDLINE

L61 ANSWER 66 OF 72 MEDLINE on STN DUPLICATE 31

TI Flagellar structure and hyperthermophily: analysis of a single flagellin gene and its product in Aquifex pyrophilus.

SO Journal of bacteriology, (1995 Nov) 177 (22) 6630-7.

Journal code: 2985120R. ISSN: 0021-9193.

AU Behammer W; Shao Z; Mages W; Rachel R; Stetter K O; Schmitt R

AN 96062250 MEDLINE

L61 ANSWER 67 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Root of the universal tree of life based on ancient aminoacyl-tRNA synthetase gene duplications

SO Proceedings of the National Academy of Sciences of the United States of America (1995), 92(7), 2441-5

CODEN: PNASA6; ISSN: 0027-8424

AU Brown, James R.; Doolittle, W. Ford

AN 1995:479772 HCAPLUS

DN 123:191805

L61 ANSWER 68 OF 72 MEDLINE on STN DUPLICATE 32

TI Arrangement and nucleotide sequence of the gene (fus) encoding elongation factor G (EF-G) from the hyperthermophilic bacterium Aquifex pyrophilus: phylogenetic depth of hyperthermophilic bacteria inferred from analysis of the EF-G/fus sequences.

SO Journal of molecular evolution, (1995 Dec) 41 (6) 803-12.

Journal code: 0360051. ISSN: 0022-2844.

AU Bocchetta M; Ceccarelli E; Creti R; Sanangelantoni A M; Tiboni O; Cammarano P

AN 96139013 MEDLINE

L61 ANSWER 69 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN

TI Cloning, sequencing, and expression of RecA proteins from three distantly related thermophilic eubacteria

SO Journal of Biological Chemistry (1994), 269(41), 25928-35

CODEN: JBCHA3; ISSN: 0021-9258

AU Wetmur, James G.; Wong, Daphne M.; Ortiz, Benjamin; Tong, Jie; Reichert, Frederick; Gelfand, David H.

AN 1994:624939 HCAPLUS

DN 121:224939

L61 ANSWER 70 OF 72 HCAPLUS COPYRIGHT 2005 ACS on STN
 TI A physical map of the hyperthermophilic bacterium Aquifex pyrophilus
 chromosome
 SO Journal of Bacteriology (1994), 176(21), 6776-80
 CODEN: JOBAAY; ISSN: 0021-9193
 AU Shao, Zhixin; Mages, Wolfgang; Schmitt, Ruediger
 AN 1994:694242 HCAPLUS
 DN 121:294242

L61 ANSWER 71 OF 72 MEDLINE on STN DUPLICATE 33
 TI Phylogenetic analysis of the hyperthermophilic pink filament community in
 Octopus Spring, Yellowstone National Park.
 SO Applied and environmental microbiology, (1994 Jun) 60 (6) 2113-9.
 Journal code: 7605801. ISSN: 0099-2240.
 AU Reysenbach A L; Wickham G S; Pace N R
 AN 94304181 MEDLINE

L61 ANSWER 72 OF 72 MEDLINE on STN DUPLICATE 34
 TI A phylogenetic analysis of Aquifex pyrophilus.
 SO Systematic and applied microbiology, (1992 Aug) 15 (3) 352-6.
 Journal code: 8306133. ISSN: 0723-2020.
 (Investigators: Woese C R, U IL, Urbana, Dept Microbiology) Report No.:
 NASA-00016510.
 AU Burggraf S; Olsen G J; Stetter K O; Woese C R
 AN 2001658644 MEDLINE

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